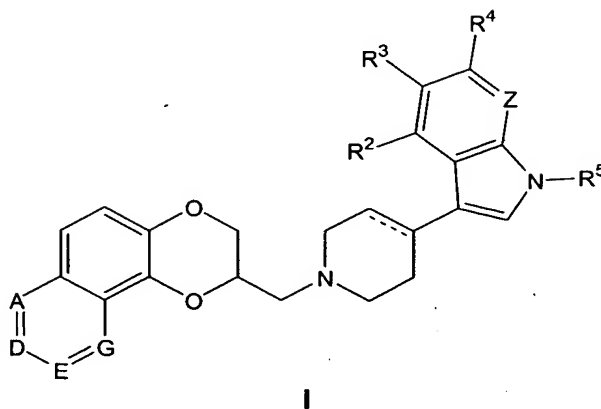


CLAIMS

What is claimed is:

1. A method of making compounds of Formula I:



wherein

R<sup>1</sup> is hydrogen, hydroxy, halo, cyano, carboxamido, carboalkoxy of two to six carbon atoms, alkyl of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms;

R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, and R<sup>6</sup> are, independently, hydrogen, hydroxy, halo, cyano, carboxamido, carboalkoxy of two to six carbon atoms, trifluoromethyl, alkyl of 1 to 6 carbon atoms, alkoxy of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms

R<sup>5</sup> is hydrogen or alkyl of 1 to 6 carbon atoms;

A dotted line represents an optional double bond;

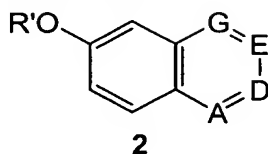
A and D are selected from carbon, substituted by R<sup>1</sup>, and nitrogen, provided that at least one of A and D is nitrogen;

E and G are carbon, substituted by R<sup>1</sup>; and

Z is N or CR<sup>6</sup>;

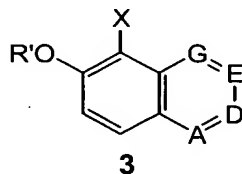
- or pharmaceutically acceptable salts thereof, comprising the steps of:

a) halogenating a compound of the formula:



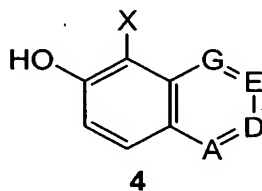
wherein R' is alkyl of 1-6 carbon atoms;

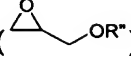
5 with a halogenating reagent to afford a compound of the formula:

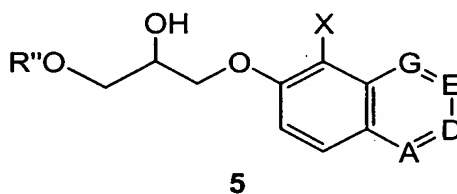


wherein X is Br, Cl, or I;

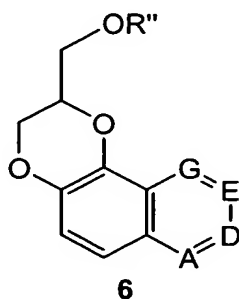
10 b) dealkylating the compound of Formula 3 in an acid to afford a compound of the formula:



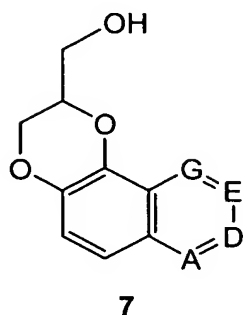
15 c) alkylating the compound of Formula 4 with R'' protected glycidyl ethers ()  
wherein R'' is benzyl or substituted benzyl to afford compound of the formula:



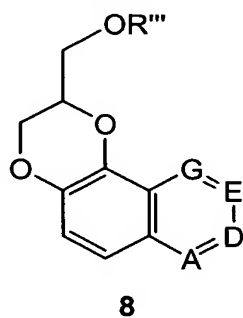
20 d) cyclizing the compound of Formula 5 with palladium or copper catalyst to afford a compound of the formula:



e) debenzylating the compound of Formula 6 to afford the compound of the formula:

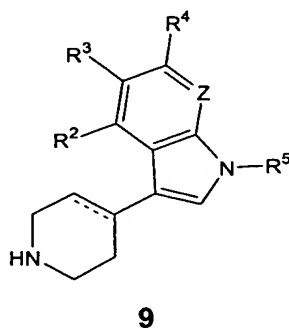


f) activating the hydroxy moiety of the compound of Formula 7 with with a sulfonating reagent to afford a compound of the formula:

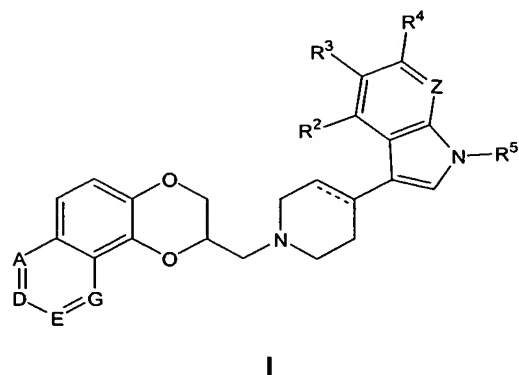


wherein R''' is an aryl- or alkyl- sulfonate; and

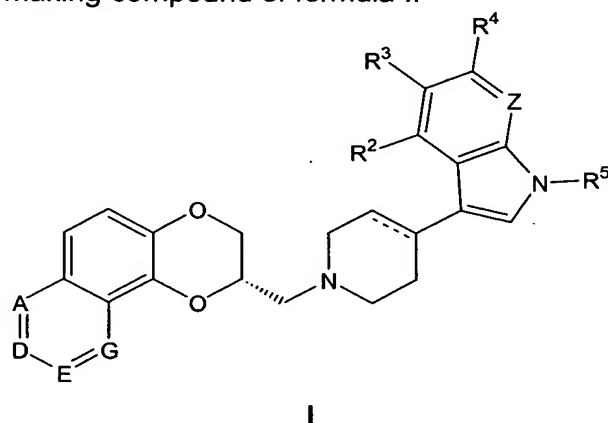
g) coupling the compound of Formula 8 with the appropriate azaheterocycle of Formula 9



in the presence of base to provide a compound of Formula I



- 5     2.     A method of making compound of formula I:



wherein

- 10      $R^1$  is hydrogen, hydroxy, halo, cyano, carboxamido, carboalkoxy of two to six carbon atoms, alkyl of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms;
- 15      $R^2$ ,  $R^3$ ,  $R^4$ , and  $R^6$  are, independently, hydrogen, hydroxy, halo, cyano, carboxamido, carboalkoxy of two to six carbon atoms, trifluoromethyl, alkyl of 1 to 6 carbon atoms, alkoxy of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms
- 20      $R^5$  is hydrogen or alkyl of 1 to 6 carbon atoms;
- A dotted line represents an optional double bond;

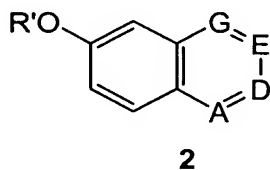
A and D are selected from carbon substituted by  $R^1$  and nitrogen, provided that at least one of A and D is nitrogen;

E and G are carbon, substituted by  $R^1$ ; and

Z is N or  $CR^6$ ;

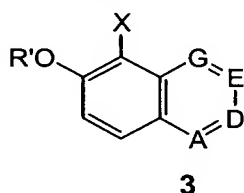
5 or pharmaceutically acceptable salts thereof, comprising the steps of

a) halogenating a compound of the formula:



10 wherein  $R'$  is alkyl of 1-6 carbon atoms;

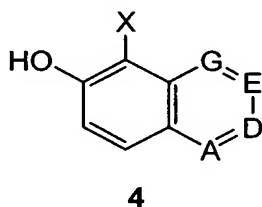
with N-halosuccinimide in a solvent to afford a compound of the formula:



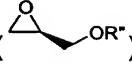
wherein X is Br, Cl, or I;

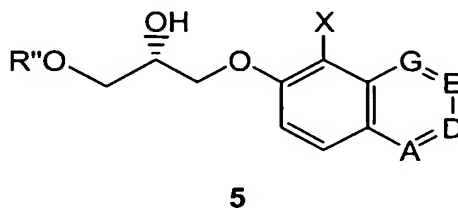
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b) dealkylating the compound of Formula 3 in an acid to afford a compound of the formula:

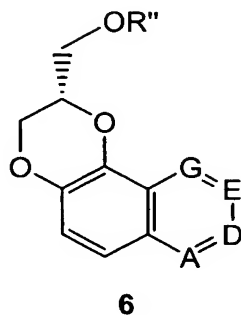


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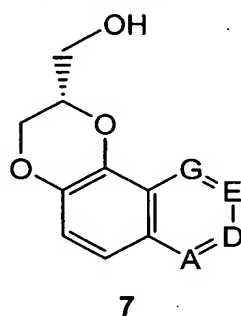
c) alkylating the compound of Formula 4 with  $R''$  protected glycidyl ethers () , wherein  $R''$  is benzyl or substituted benzyl, or alkyl alcohol of 1 to 6 carbon atoms to afford compound of the formula:



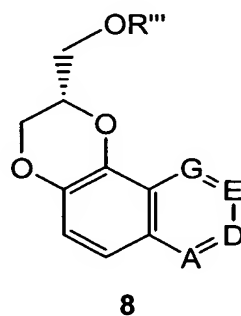
d) cyclizing the compound of Formula 5 with palladium or copper catalyst to afford a compound of the formula:



e) debenzylating the compound of Formula 6 to afford the compound of the formula:

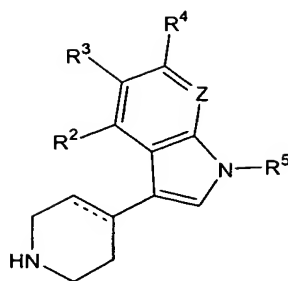


f) activating the hydroxy moiety of the compound of Formula 7 with alkyl- or aryl-sulfonyl chloride or with alkyl or aryl sulfonic anhydride in the presence of a base to afford a compound of the formula:



wherein R''' is an alkyl- or aryl- sulfonate; and

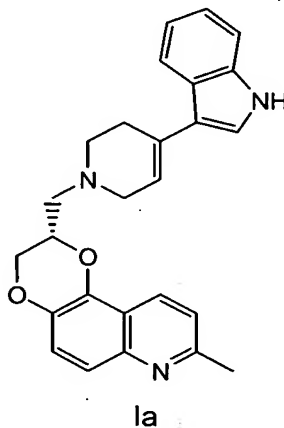
g) coupling the compound of Formula 8 with the appropriate azaheterocycle of Formula 9



**9**

in the presence of base to provide a compound of Formula I.

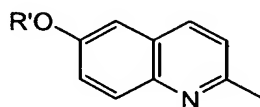
- 5     3.     A method of making compound of Formula Ia:



**Ia**

comprising the steps:

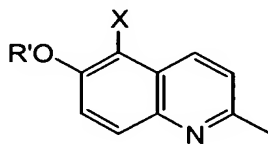
- 10     a) halogenating a compound of the formula:



**2**

wherein R' is alkyl of 1-6 carbon atoms;

- 15     with N-halosuccinimide in a solvent to afford a compound of the formula:

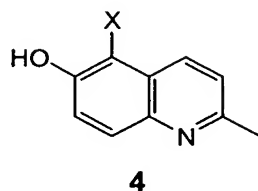


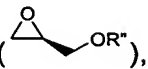
**3**

wherein X is Br, Cl, or I;

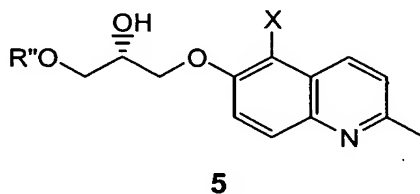
b) dealkylating the compound of Formula 3 in an acid to afford a compound of the formula:

5



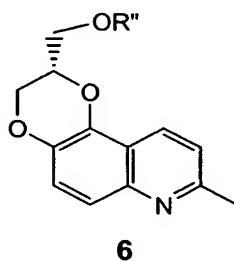
c) alkylating the compound of Formula 4 with R'' protected glycidyl ethers ()  
wherein R'' is benzyl or substituted benzyl;  
to afford compound of the formula:

10



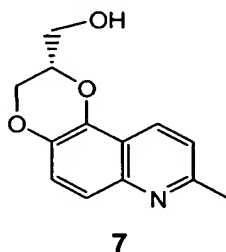
d) cyclizing the compound of Formula 5 with palladium or copper catalyst to afford a compound of the formula:

15



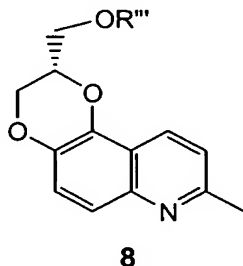
e) debenzylating the compound of Formula 6 to afford the compound of the formula:

20





f) activating the hydroxy moiety of the compound of Formula 7 with alkyl or aryl sulfonyl chloride with alkyl or aryl sulfonic anhydride in the presence of a base to afford a compound of the formula:



wherein R''' is a alkyl- or aryl- sulfonate; and

g) coupling the compound of Formula 8 with 3-tetrahydropyridinyl-indole in the presence of base to provide a compound of Formula Ia.

10

4. The method of Claim 1 wherein the compound of Formula 2 is treated with N-halosuccinimide in acetonitrile.

5. The method of Claim 1 wherein the halogenation reaction is quenched with a 10% NaHSO<sub>3</sub> solution and the product precipitated with NaOH.

15

6. The method of Claim 1 wherein the compound of Formula 3 is dealkylated with a Lewis acid.

7. The method of Claim 1 wherein the compound of Formula 3 is dealkylated with a protic acid.

20

8. The method of Claim 7 wherein the protic acid is HBr.

9. The method of Claim 8 wherein the compound of Formula 2 is heated to reflux in HBr for from about 6 to about 7 hours.

25

10. The method of Claim 1 wherein the compound of Formula 4 is alkylated with benzyl- or substituted benzyl-glycidyl ether in a polar solvent.

30

11. The method of Claim 1 wherein the compound of Formula 4 is alkylated with benzyl glycidyl ether, 4-bromobenzyl glycidyl ether, 4-chlorobenzyl glycidyl ether, 3, 4-dimethoxybenzyl glycidyl ether, 2- or 4-nitrobenzyl glycidyl ether, or 4-methoxy-phenyl glycidyl ether.
- 5 12. The method of Claim 10 wherein the polar solvent is dimethylsulfoxide, dimethyl-formamide, or dimethylacetamide.
- 10 13. The method of Claim 10 wherein the base is triethylamine, sodium carbonate, or potassium carbonate.
14. The method of Claim 1 wherein the compound of Formula 5 is cyclized using palladium catalyst in the presence of phosphine ligand and base.
- 15 15. The method of Claim 14 wherein the palladium catalyst is tris(dibenzylidene-acetone)dipalladium, tetrakis(triphenylphosphine)palladium, or palladium acetate with phosphine ligands selected from the group consisting of ( $\pm$ ) 2,2'-bis(diphenyl-phosphino)-1,1'-binaphthyl and separate enantiomers thereof; ( $\pm$ ) 2,2'-bis(di-*p*-tolyl-phosphino)-1,1'-binaphthyl and separate enantiomers thereof; 1-1'-bis(diphenyl-phosphino)ferrocene; 1,3-bis(diphenyl-phosphino)propane; and 1,2-bis(diphenyl-phosphino)ethane.
- 20 16. The method of Claim 14 wherein the base is sodium hydride, lithium hydride, potassium hydride, potassium carbonate, sodium carbonate, titanium carbonate, cesium carbonate, potassium *t*-butoxide or potassium phosphate tribasic.
- 25 17. The method of Claim 1 wherein the compound of Formula 5 is cyclized using copper catalyst in the presence of base.
- 30 18. The method of Claim 17 wherein the copper catalyst is copper iodide.
19. The method of Claim 17 wherein the base is sodium hydride, lithium hydride or potassium hydride.

20. The method of Claim 1 wherein the compound of Formula 6 is debenzylated with Lewis acid, strong protic acid or under reductive cleavage conditions.
21. The method of Claim 20 wherein the Lewis acid is boron tribromide, boron trichloride, aluminum trichloride, ferric chloride or trimethylsilyl iodine.
22. The method of Claim 20 wherein the protic acid is hydrobromic acid or hydrochloric acid.
23. The method of Claim 1 wherein a) the compound of Formula 5 is cyclized using copper catalyst in the presence of NaH to provide compound of Formula 6, and b) compound of Formula 6 is debenzylated with HCl to provide compound of Formula 7.
24. The method of Claim 20 wherein reductive cleavage is performed using palladium catalyst and hydrogen transfer reagents.
25. The method of Claim 24 wherein the palladium catalyst is Pd/C.
26. The method of Claim 24 wherein the transfer reagent is cyclohexene, methylcyclohexene, ammonium formate or hydrogen.
27. The method of Claim 24 wherein the palladium catalyst is Pd/C and the transfer reagent is cyclohexene.
28. The method of Claim 1 wherein the compound of Formula 7 is activated with a sulfonating reagent or with an aryl or alkyl sulfonic anhydride in the presence of a base.
29. The method of Claim 28 wherein the compound of Formula 7 is activated with *p*-toluenesulfonyl chloride, methanesulfonyl chloride, 2-, 3- or 4-nitrobenzenesulfonyl chloride, 2- or 4-bromobenzenesulfonyl chloride or trifluoromethylsulfonic anhydride.

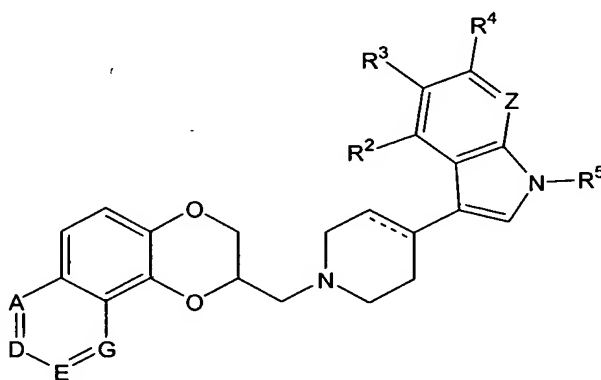
30. The method of Claim 28 wherein the compound of Formula 7 is activated with 4-bromobenzenesulfonylchloride.

31. The method of Claim 28 wherein the base is triethylamine or pyridine in methylene chloride, tetrahydrofuran, or toluene.

32. The method of Claim 1 wherein the compound of Formula 8 is coupled with an azaheterocycle of Formula 9 in the presence of a base.

33. The method of Claim 32 wherein the base is sodium carbonate, potassium carbonate, or Hünig's base.

34. A method of making compounds of Formula I:



I

wherein

$R^1$  is hydrogen, hydroxy, halo, cyano, carboxamido, carboalkoxy of two to six carbon atoms, alkyl of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms;

$R^2$ ,  $R^3$ ,  $R^4$ , and  $R^6$  are, independently, hydrogen, hydroxy, halo, cyano, carboxamido, carboalkoxy of two to six carbon atoms, trifluoromethyl, alkyl of 1 to 6 carbon atoms, alkoxy of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms

$R^5$  is hydrogen or alkyl of 1 to 6 carbon atoms;

A dotted line represents an optional double bond;

A and D are selected from carbon, substituted by  $R^1$ , and nitrogen, provided that at least one of A and D is nitrogen;

5 E and G are carbon, substituted by  $R^1$ ; and

Z is N or  $CR^6$ ;

or pharmaceutically acceptable salts thereof, comprising the steps of:

a) halogenating a compound of the formula:



wherein  $R'$  is alkyl of 1-6 carbon atoms;

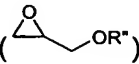
with N-halosuccinimide in a solvent to afford a compound of the formula:

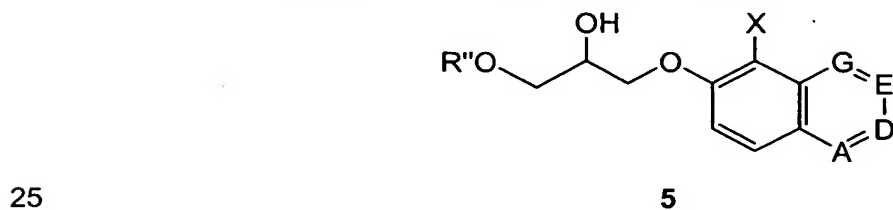


wherein X is Br, Cl, or I;

b) dealkylating the compound of Formula 3 in an acid to afford a compound of the formula:



c) alkylating the compound of Formula 4 with  $R''$  protected glycidyl ethers ()  
wherein  $R''$  is benzyl or substituted benzyl to afford compound of the formula:



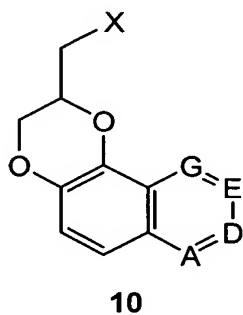
d) cyclizing the compound of Formula 5 with palladium or copper catalyst to afford a compound of the formula:



e) debenzylating the compound of Formula 6 to afford the compound of the formula:

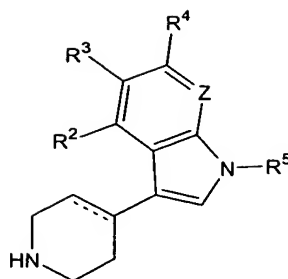


f) activating the hydroxy moiety of the compound of Formula 7 to a halide to afford a compound of the formula:



15 wherein X is I, Br or Cl and

g) coupling the compound of Formula 10 with the appropriate azaheterocycle of Formula 9



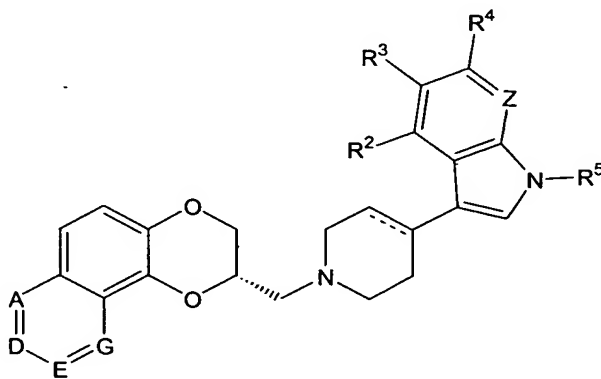
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in the presence of base to provide a compound of Formula I.

35. The method of Claim 34 wherein the compound of Formula 7 is activated with a halogenating reagent.

36. The method of Claim 34 wherein the compound of Formula 7 is activated as a halide with phosphorous triiodide, phosphorous tribromide, phosphorous pentachloride or thionyl chloride.

37. A method of making compounds of Formula I:



I

wherein

R<sup>1</sup> is hydrogen, hydroxy, halo, cyano, carboxamido, carboalkoxy of two to six carbon atoms, alkyl of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms;

R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, and R<sup>6</sup> are, independently, hydrogen, hydroxy, halo, cyano, carboxamido, carboalkoxy of two to six carbon atoms, trifluoromethyl, alkyl

of 1 to 6 carbon atoms, alkoxy of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms

5  $R^5$  is hydrogen or alkyl of 1 to 6 carbon atoms;

A dotted line represents an optional double bond;

A and D are selected from carbon, substituted by  $R^1$ , and nitrogen, provided that at least one of A and D is nitrogen;

E and G are carbon, substituted by  $R^1$ ; and

10 Z is N or  $CR^6$ ;

or pharmaceutically acceptable salts thereof  
comprising the steps of:

a) halogenating a compound of the formula:



wherein  $R'$  is alkyl of 1-6 carbon atoms;

with N-halosuccinimide in a solvent to afford a compound of the formula:

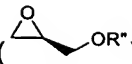


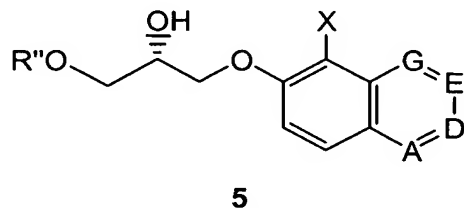
wherein X is Br, Cl, or I;

b) dealkylating the compound of Formula 3 in an acid to afford a compound of the formula:



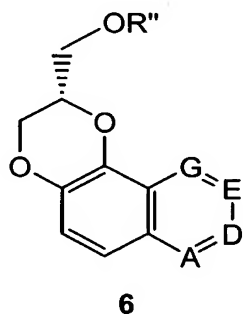


c) alkylating the compound of Formula 4 with R'' protected glycidyl ethers () , wherein R'' is benzyl or substituted benzyl to afford compound of the formula:



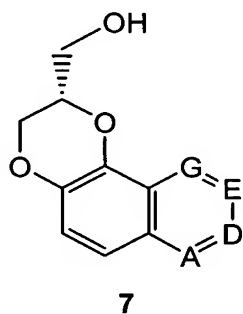
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d) cyclizing the compound of Formula 5 with palladium or copper catalyst to afford a compound of the formula:



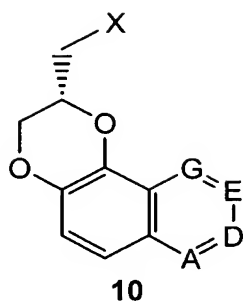
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e) debenzylating the compound of Formula 6 to afford the compound of the formula:



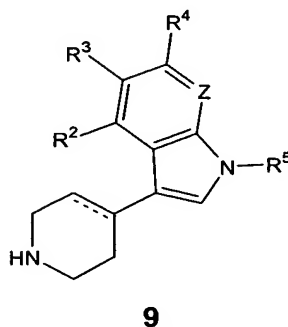
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f) activating the hydroxy moiety of the compound of Formula 7 to a halide to afford a compound of the formula:



wherein X is I, Br or Cl; and

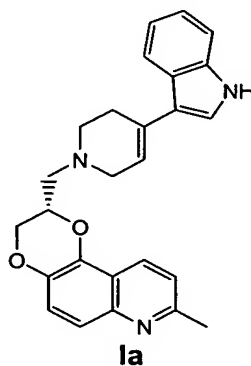
- 5 g) coupling the compound of Formula **10** with the appropriate azaheterocycle of Formula **9**



in the presence of base to provide a compound of Formula I.

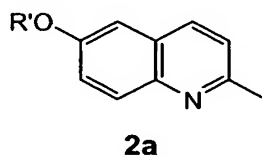
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38. A method of making a compound of Formula **1a**:

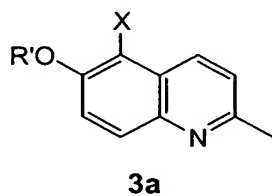


comprising the steps:

- 15 a) halogenating a compound of the formula:

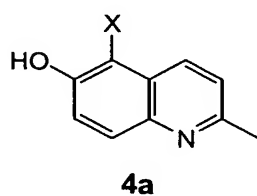


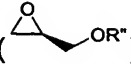
wherein R' is alkyl of 1-6 carbon atoms;  
with N-halosuccinimide in a solvent to afford a compound of the formula:

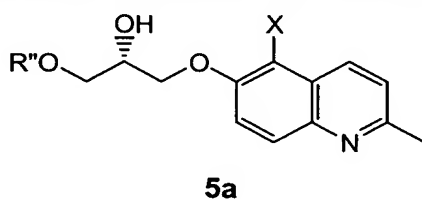


5                wherein X is Br, Cl, or I;

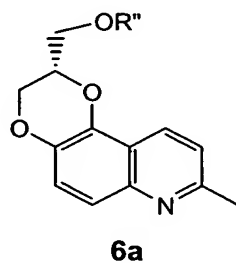
b) dealkylating the compound of Formula 3a in an acid to afford a compound of the formula:



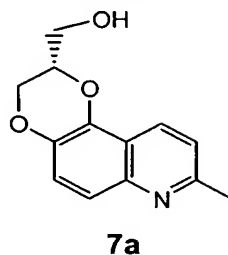
10            c) alkylating the compound of Formula 4a with R'' protected glycidyl ethers ()  
wherein R'' is benzyl or substituted benzyl; to afford compound of the formula:



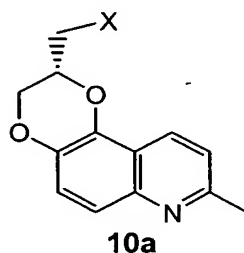
15            d) cyclizing the compound of Formula 5a with palladium or copper catalyst to afford a compound of the formula:



e) debenzylating the compound of Formula 6a to afford the compound of the formula:



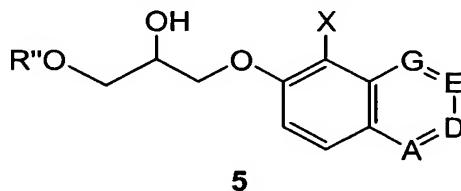
- 5 f) activating the hydroxy moiety of the compound of Formula 7a to a halide to afford a compound of the formula:



wherein X is I, Br or Cl; and

- 10 g) coupling the compound of Formula 10a with 3-tetrahydropyridinyl-indole in the presence of base to provide a compound of Formula 1a.

39. A method of preparing compounds of the formula 5:



15

wherein

- R<sup>1</sup> is hydrogen, hydroxy, halo, cyano, carboxamido, carboalkoxy of two to six carbon atoms, alkyl of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms;

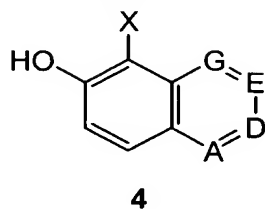
20

A and D are selected from carbon substituted by R<sup>1</sup> and nitrogen, provided that at least one of A and D is nitrogen;

E and G are carbon, substituted by R<sup>1</sup>;

- 25 R'' is benzyl or substituted benzyl;

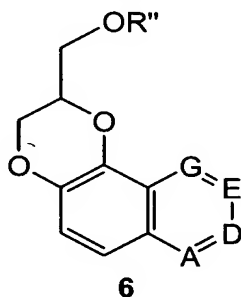
and X is halogen;  
comprising alkylating the compound of formula 4



5 with R" protected glycidyl ethers ( ).

40. The method of Claim 39 wherein A is nitrogen, and D is carbon.

41. A method of preparing a compound of Formula 6



10

R<sup>1</sup> is hydrogen, hydroxy, halo, cyano, carboxamido, carboalkoxy of two to six carbon atoms, alkyl of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms;

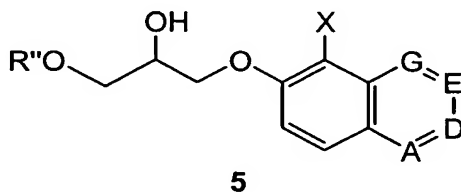
15

A and D are selected from carbon substituted by R<sup>1</sup> and nitrogen, provided that at least one of A and D is nitrogen;

E and G are carbon, substituted by R<sup>1</sup>; and

20 R" is benzyl or substituted benzyl,

comprising the step of cyclizing a compound of Formula 5



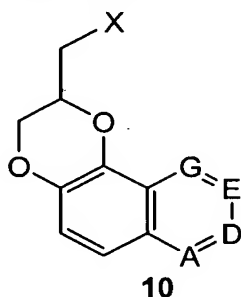
with palladium or copper catalyst.

42. The method of Claim 41 wherein the catalyst is a palladium catalyst.

43. The method of Claim 41 wherein A is nitrogen and D is carbon.

5

44. A method of preparing a compound of Formula 10



wherein

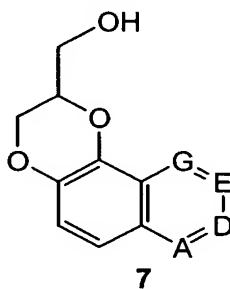
10  $R^1$  is hydrogen, hydroxy, halo, cyano, carboxamido, carboalkoxy of two to six carbon atoms, alkyl of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms;

15 A and D are selected from carbon substituted by  $R^1$  and nitrogen, provided that at least one of A and D is nitrogen;

E and G are carbon, substituted by  $R^1$ ; and

X is I, Cl or Br:

comprising activating compound of Formula 7



20

to halide with a standard halogenating reagent.

45. The method of Claim 44 wherein the halogenating agent is halophosphorous.

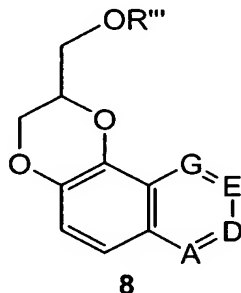
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46. The method of Claim 44 wherein the halophosphorous is phosphorous triiodide, phosphorous tribromide or phosphorous pentachloride.

47. The method of Claim 44 wherein A is nitrogen, and D is carbon.

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48. A method of preparing a compound of Formula 8



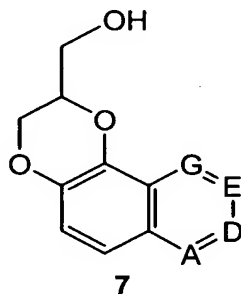
10 wherein R<sup>1</sup> is hydrogen, hydroxy, halo, cyano, carboxamido, carboalkoxy of two to six carbon atoms, alkyl of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms;

15 A and D are selected from carbon substituted by R<sup>1</sup> and nitrogen, provided that at least one of A and D is nitrogen;

E and G are carbon, substituted by R<sup>1</sup>; and

R''' is an aryl- or alkyl- sulfonate;

comprising activating the hydroxy moiety of the compound of formula 7



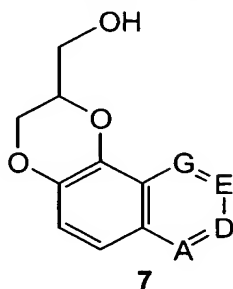
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with aryl or alkyl sulfonyl chloride or with aryl or alkyl sulfonic anhydride in the presence of a base.

49. The method of Claim 48 wherein A is nitrogen and D is carbon.

25

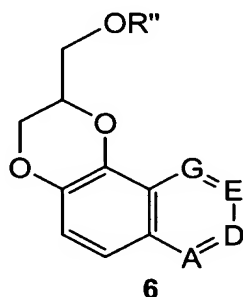
50. A method of preparing a compound of Formula 7



wherein R<sup>1</sup> is hydrogen, hydroxy, halo, cyano, carboxamido, carboalkoxy of two to six carbon atoms, alkyl of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms;

A and D are selected from carbon substituted by R<sup>1</sup> and nitrogen, provided that at least one of A and D is nitrogen; and  
E and G are carbon, substituted by R<sup>1</sup>;

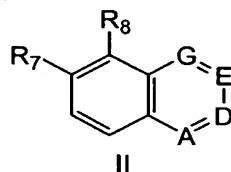
comprising debenzylating a compound of Formula 6



where R'' is benzyl or substituted benzyl.

51. The method of Claim 50 wherein A is nitrogen, and D is carbon.

52. A compound of the formula



wherein:

R<sup>1</sup> is hydrogen, hydroxy, halo, cyano, carboxamido, carboalkoxy of two to six carbon atoms, alkyl of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms,

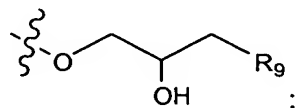


amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms;

A and D are selected from carbon substituted by  $R^1$  and nitrogen, provided that at least one of A and D is nitrogen;

E and G are carbon, substituted by  $R^1$ ;

$R_7$  is hydroxy, alkoxy of 1-6 carbon atoms, or alkoxy of the formula

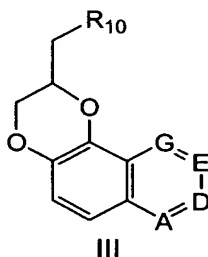


wherein  $R_9$  is hydroxy, benzyl ether, substituted benzyl ethers such as 4-bromobenzyl ether, 4-chlorobenzyl ether, 3, 4-dimethoxybenzyl ether, 2- or 4-nitrobenzyl ether, or 4-methoxyphenyl; and

$R_8$  is halogen or hydrogen; and salts thereof.

53. A compound of Claim 52 wherein A is nitrogen and D is carbon.

54. A compound of the formula



wherein:

$R^1$  is hydrogen, hydroxy, halo, cyano, carboxamido, carboalkoxy of two to six carbon atoms, alkyl of 1 to 6 carbon atoms, alkanoyloxy of 2 to 6 carbon atoms, amino, mono- or di-alkylamino in which each alkyl group has 1 to 6 carbon atoms, alkanamido of 2 to 6 carbon atoms, or alkanesulfonamido of 1 to 6 carbon atoms;

A and D are selected from carbon substituted by  $R^1$  and nitrogen, provided that at least one of A and D is nitrogen;

E and G are carbon, substituted by  $R^1$ ; and

$R_{10}$  is hydroxy, halide or alkyl- or aryl- sulfonates; and salts thereof.

55. A compound of Claim 54 wherein A is nitrogen and D is carbon.